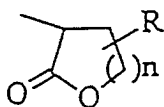


**Amendments to the Claims:**

This listing of claims replaces all prior versions and listings of claims in the application.

**Listing of Claims:**

Claim 1 (original): An acid-sensitive polymer compound, comprising:  
a film-forming polymer;  
a carboxyl group bonding to a side chain of said polymer main chain, said carboxyl group having a protective group; and  
an additional acidic functional group bonding to a side chain of said polymer main chain, said acidic functional group having an acid-cleavable protective group;  
said carboxyl group having, as said protective group, a lactone structure represented by a formula

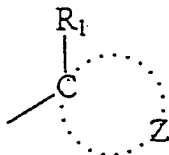


wherein n is an integer of 1 - 4, and R represents any of a hydrogen atom, an alkyl group, an alkoxyl group or an alkoxycarbonyl group and bonding to an arbitrary position of said lactone structure excluding a second position forming an ester bonding.

2 (currently amended): An acid-sensitive polymer compound as claimed in claim 1, wherein said lactone part is formed of 2-hydroxy- $[\tau]$   $\gamma$  (gamma)-butyrolactone.

3 (original): An acid-sensitive polymer compound as claimed in claim 1, wherein said acid-sensitive polymer includes a monomer unit selected from a group consisting of acrylate and methacrylate monomer unit, a vinylphenol monomer unit and an N-substituted maleimide monomer unit.

4 (original): An acid-sensitive polymer compound as claimed in claim 1, wherein said additional acidic functional group includes an additional carboxyl group having an acid-cleavable protective group, said acid-cleavable protective group having a formula of



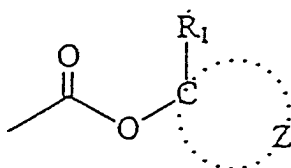
wherein  $R_1$  represents an alkyl group having a straight chain or a branched chain including 1 - 4 carbon atoms, said alkyl group being any of a substituted group and an unsubstituted group, and wherein  $Z_1$  represents a plurality of atoms necessary to complete an alicyclic hydrocarbon group together with the carbon atoms connected to  $R_1$ .

5 (original): An acid-sensitive polymer compound as claimed in claim 1, wherein said

additional functional group includes a monomer unit having an ester group, said ester group including a polycyclic alicyclic hydrocarbon part that causes a deprotection in response to an acid produced by a photoacid generator.

6 (original): An acid-sensitive polymer compound as claimed in claim 5, wherein said polycyclic alicyclic hydrocarbon part includes an adamantyl group or a norbornyl group.

7 (original): An acid-sensitive polymer compound as claimed in claim 4, wherein said additional carboxyl group having a formula of:

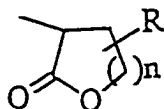


wherein R<sub>1</sub> represents an alkyl group having a straight chain or a branched chain including 1 - 4 carbon atoms, said alkyl group being any of a substituted group and an unsubstituted group, and wherein Z<sub>1</sub> represents a plurality of atoms necessary to complete an alicyclic hydrocarbon group together with the carbon atoms connected to R<sub>1</sub>.

8 (original): A resist composition, comprising:

an acid-sensitive film-forming polymer insoluble to an alkaline solution; a carboxyl group bonding to a side chain of said polymer's main chain, said carboxyl group having a

protective group; and an additional acidic functional group bonding to a side chain of said polymer main chain, said acidic functional group having an acid-cleavable protective group; said carboxyl group having, as said protective group, a lactone structure represented by a formula



wherein n is an integer of 1 - 4, and R represents any of a hydrogen atom, an alkyl group, an alkoxyl group or an alkoxycarbonyl group and bonding to an arbitrary position of said lactone structure excluding a second position forming an ester bonding; and

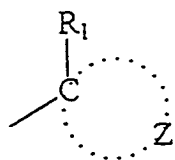
a photoacid generator causing a decomposition in response to an absorption of a radiation, said photoacid generator releasing an acid that causes a deprotection of said acid-cleavable protective group in response to said decomposition;

said resist composition becoming soluble to said alkaline solution after said acid-cleavable protective group has caused said deprotection.

9 (currently amended): A resist composition as claimed in claim 8, wherein said lactone part is formed of 2-hydroxyt-[τ] γ (gamma)-butyrolactone.

10 (original): A resist composition as claimed in claim 8, wherein said acid-sensitive polymer includes a monomer unit selected from a group consisting of acrylate and methacrylate monomer unit, a vinylphenol monomer unit and an N-substituted maleimide monomer unit.

11 (original): A resist composition as claimed in claim 8, wherein said additional acidic functional group includes an additional carboxyl group having an acid-cleavable protective group, said acid-cleavable protective group having a formula of



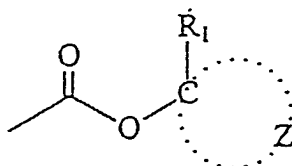
wherein R<sub>1</sub> represents an alkyl group having a straight chain or a branched chain including 1 - 4 carbon atoms, said alkyl group being any of a substituted group and an unsubstituted group, and wherein Z<sub>1</sub> represents a plurality of atoms necessary to complete an alicyclic hydrocarbon group together with the carbon atoms connected to R<sub>1</sub>.

12 (original): A resist composition as claimed in claim 8, wherein said additional functional group includes a monomer unit having an ester group, said ester group including a polycyclic alicyclic hydrocarbon part that causes a deprotection in response to an acid produced by a photoacid generator.

13 (original): A resist composition as claimed in claim 12, wherein said polycyclic alicyclic hydrocarbon part includes an adamantyl group or a norbornyl group.

14 (original): A resist composition as claimed in claim 11, wherein said additional

carboxyl group having a formula of:



wherein R<sub>1</sub> represents an alkyl group having a straight chain or a branched chain including 1 - 4 carbon atoms, said alkyl group being any of a substituted group and an unsubstituted group, and wherein Z<sub>1</sub> represents a plurality of atoms necessary to complete an alicyclic hydrocarbon group together with the carbon atoms connected to R<sub>1</sub>.

15 (original): A resist composition as claimed in claim 8, wherein said resist composition has an absorbance of 1.75 or less when provided on a silicon oxide substrate in the form of a resist film.

16 (original): A resist composition as claimed in claim 8, further comprising a solvent selected from a group consisting of: ethyl lactate, methylamylketone, methyl-3-methoxypropionate, ethyl-3-ethoxypropionate, propyleneglycol methylether acetate, and a mixture thereof.

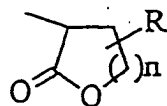
17 (currently amended): A resist composition as claimed in claim 16, further including a solvent selected from a group consisting of butyl acetate, [τ] γ

gamma)-butylolactone and propyleneglycol methylether as an auxiliary solvent.

18 (original): A method of forming a resist pattern, comprising the steps of:

applying a resist composition on a substrate to form a resist film, said resist composition comprising:

an acid-sensitive polymer compound insoluble to an alkaline solution, said acid-sensitive polymer compound comprising a film-forming polymer; a carboxyl group bonding to a side chain of said polymer main chain, said carboxyl group having a protective group; and an additional acidic functional group bonding to a side chain of said polymer main chain, said acidic functional group having an acid-cleavable protective group; said carboxyl group having, as said protective group, a lactone structure represented by a formula



wherein n is an integer of 1 - 4, and R represents any of a hydrogen atom, an alkyl group, an alkoxy group and an alkoxycarbonyl group and bonding to an arbitrary position of said lactone structure excluding a second position forming an ester bonding; and

a photoacid generator causing a decomposition in response to an absorption of a radiation, said photoacid generator releasing an acid that causes a deprotection of said acid-cleavable

protective group in response to said decomposition;

said resist composition becoming soluble to said alkaline solution after said acid-cleavable protective group has caused said deprotection;

exposing said resist film to an exposure radiation that induces said decomposition in said photoacid generator; and

developing said resist film, after said process of exposing, by a basic solution.

19 (canceled).

20 (currently amended): A method as claimed in claim 18 [19], wherein said step of forming said resist film includes a step of applying a solution of said resist composition on said substrate with a thickness of 0.1-2  $\mu\text{m}$ .

21 (currently amended): A method as claimed in claim 18 [19], wherein said step of exposing said resist film is conducted by a KrF excimer laser.

22 (currently amended): A method as claimed in claim 18 [19], wherein said step of exposing said resist film is 15 conducted by an ArF excimer laser.

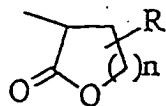
23 (currently amended): A method as claimed in claim 18 [19], wherein said step of

developing is conducted by using an alkaline aqueous solution.

Claim 24 (new): A method of fabricating a semiconductor device, comprising the steps of:

applying a resist composition on a substrate to form a resist film, said resist composition comprising:

an acid-sensitive polymer compound insoluble to an alkaline solution, said acid-sensitive polymer compound comprising a film-forming polymer; a carboxyl group bonding to a side chain of said polymer main chain, said carboxyl group having a protective group; and an additional acidic functional group bonding to a side chain of said polymer main chain, said acidic functional group having an acid-cleavable protective group; said carboxyl group having, as said protective group, a lactone structure represented by formula



wherein n is an integer of 1-4, and R represents any of a hydrogen atom, an alkyl group, an alkoxyl group or an alkoxy carbonyl group and connected to an arbitrary position of said lactone structure excluding a second position forming an ester bonding; and

a photoacid generator causing a decomposition in response to an absorption of a radiation, said photoacid generator releasing an acid that causes a deprotection of said acid-cleavable protective group in response to said decomposition;

said resist composition becoming soluble to said alkaline solution after said acid-cleavable protective group has caused said deprotection;

exposing said resist film to an exposure radiation that induces said decomposition in said photoacid generator;

developing said resist film, after said step of exposure, by a basic solution to form a resist pattern; and

etching said substrate while using said resist pattern as a mask.

Claim 25 (new): A method as claimed in claim 24, wherein said step of forming said resist film includes a step of applying a solution of said resist composition on said substrate with a thickness of 0.1 – 2  $\mu\text{m}$ .

Claim 26 (new): A method as claimed in 24, wherein said step of exposing said resist film is conducted by a KrF excimer laser.

Claim 27 (new): A method as claimed in claim 24, wherein said step of exposing said resist film is conducted by an ArF excimer laser.

Claim 28 (new): A method as claimed in claim 24, wherein said step of developing is conducted by using an alkaline aqueous solution.